



# Memorandum

**TO:** TRANSPORTATION AND  
ENVIRONMENT COMMITTEE

**FROM:** John Ristow

**SUBJECT:** City Street Sweeping  
Operations Status Report

**DATE:** November 8, 2024

Approved

Date:

11/25/24

## **RECOMMENDATION**

Accept this status update on street sweeping operations.

## **BACKGROUND**

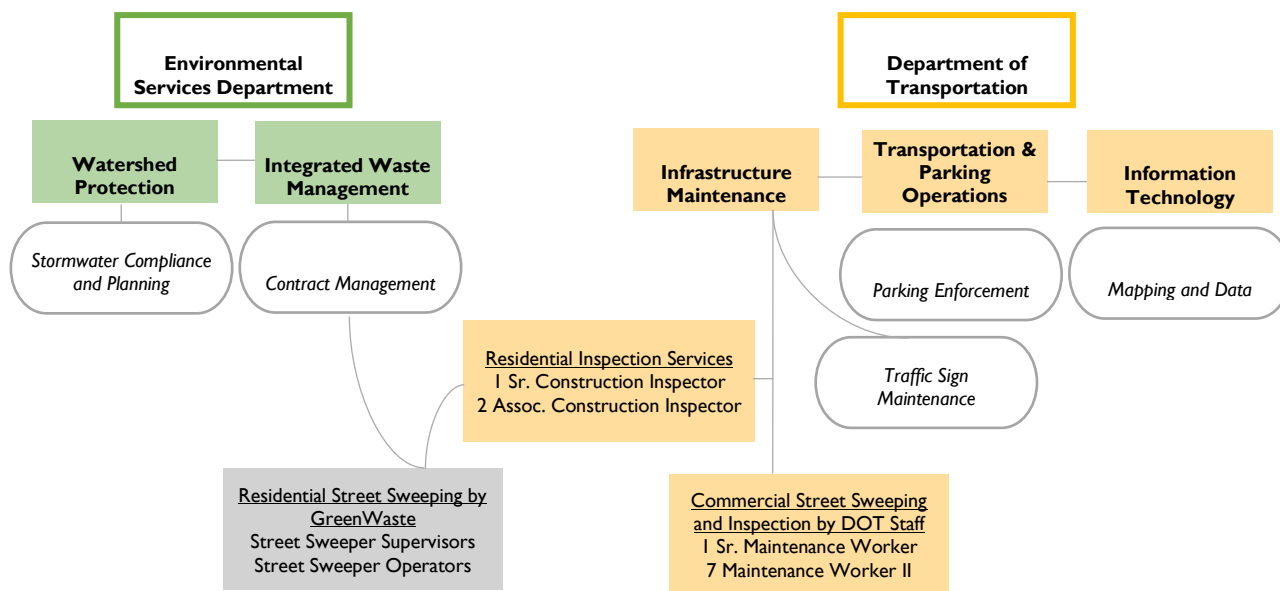
The purpose of San José's street sweeping program is to prevent pollutants such as sediment, nutrients (e.g., fertilizers and animal waste), toxic metals, and organic materials from entering storm drains and polluting waterways. The Department of Transportation (DOT) oversees the sweeping of 67,000 miles of curb each year using a model consisting of an in-house program delivered by DOT street sweeper operators, and the Residential Street Sweeping program delivered by Green Waste Recovery Inc. (GreenWaste) and overseen by DOT inspectors. In addition to DOT sweeper operators and Residential Street Sweeping inspectors, the Infrastructure Maintenance Division's Traffic Maintenance Section houses staff who install and maintain parking prohibition signs. DOT's Transportation Safety, Operations & Parking Division's On-Street Parking Management Section has parking enforcement staff who monitor compliance with posted signs along signed routes (approximately 546 or 13.2% of miles). This program is regulated by San José's stormwater discharge permit issued by the San Francisco Bay Area Regional Water Quality Control Board.

The Environmental Services Department Watershed Protection Division oversees permitting and compliance with federal, state, and local regulations, and coordinates with DOT to meet trash, polychlorinated biphenyls, mercury, and copper reduction targets mandated by the stormwater discharge permit. The contract with GreenWaste is part of the larger solid waste agreement that is managed by the Environmental Services Department Integrated Waste Management Division.

## **ANALYSIS**

Figure 1 below summarizes the street-sweeping roles and responsibilities as assigned:

Figure 1: Street Sweeping Organization Chart



### **DOT In-House Street Sweeping Program**

DOT's in-house street sweeping program is delivered by city staff who operate overnight during the graveyard shift (11:00 pm to 7: 00 am). The staff composition is shown in Figure 1 above. This team manages the following routes:

- **Downtown:** Monday-Thursday during graveyard shift including downtown bikeways
- **Neighborhood Business Districts:** Twice per week, during the graveyard shift
- **Arterials, Connectors, and Bikeways:** Twice per month, during the graveyard shift

In June of 2024, staff implemented the final recommendation from the 2016 street sweeping audit by deploying a sweep waste bin program. Bins are placed at the beginning of the shift at predetermined sites which vary from day to day based on route locations. Operators deposit waste in those bins and remove them at shift end.

### **Residential Street Sweeping**

Residential streets are swept once per month by GreenWaste and overseen by a three-person inspection team. The team logs route completion data and identifies field conditions that are used to generate reports leading to corrective action. The virtual

inspection form with visual aid is provided as Attachment A. Inspectors coordinate with the contractor to address missed sweeps and revisit areas that can be swept to correct a minor issue such as a small amount of debris in the roadway. Inspection staff also track “trouble spots” using a database that details the type of issue as well as parking impacts. This process enables inspection staff to follow up by alerting the property owner of the issue and allowing them the opportunity to address it. DOT inspection staff also distribute flyers in impacted neighborhoods to encourage residents to remove obstructions, including cars, cones, and debris piles that cannot be swept by sweepers.

### Common Impediments to Sweeping

Parked cars are the most frequently occurring and impactful obstacles to a successful sweep. For every parked car, the sweeper is unable to sweep approximately three car lengths of curb line due to maneuverability constraints of the sweeper. In San José, signs that prohibit parking during scheduled street sweeping cover 13.2 % of curb miles (approximately 546 miles). There are several reasons for this, including additional unfunded contract and enforcement costs, and lack of public support due to parking impacts in neighborhoods with limited nearby parking options. In FY 23-24, the DOT Parking Compliance Unit issued over 66,000 citations to nearly 45,000 vehicles for violating posted street sweep parking restrictions. Approximately, 90% of vehicles cited during the year received one or two citations indicating that these vehicle owners may have simply forgotten to move their car on street sweep days. The low volume (1.3%) of habitual offenders (6 or more annual citations) suggests that in most cases citations are an effective enforcement tool.

The only enforcement option legally available to DOT’s Parking Compliance Unit in support of street sweeping is to issue violations of posted parking restrictions. Cars parked in violation of posted parking restrictions are not towed. Even if feasible legally, attempting to tow vehicles in violation of street sweeping restrictions is infeasible from a practical standpoint (nearly 45,000 vehicles cited in FY 23-24) and a task the city and tow vendors may never be resourced to accomplish. For reference, the DOT Vehicle Abatement Program tows around 3,300 vehicles annually.

Other barriers to street sweeping include yard waste piles and waste containers. While residential street sweeping is scheduled for the day following solid waste collection, early set-out of yard waste in the street can be especially challenging for street sweepers because piles of landscape debris can hide items that may damage the sweeper or act as a projectile and harm people or property nearby. If a sweeper encounters a pile of landscape debris, it will often drive away from the curb to avoid it. DOT sometimes receives complaints regarding landscape waste and debris; however, it is important to note that per the municipal code, property owners are responsible for ensuring their curb lines are clear, and landscape waste set outs are allowed only within 24 hours of scheduled landscape waste pickup. Sweepers must also avoid low-hanging

trees with branches within fourteen feet of the road. At this height, sweepers will hit branches resulting in damaged equipment and compromised trees. Property owners are responsible for ensuring tree clearance and when pruning needs are identified, DOT inspectors alert property owners by leaving door hangers with information on how to obtain a no cost pruning permit. DOT sweeper operator staff and inspectors utilize an online inspection tool to document and address these impediments. DOT is currently participating in a pilot program evaluating the use of artificial intelligence to detect and code roadway obstructions that impact sweeping which would streamline identification and obstruction reporting.

### Bike Lane Sweeping and Proactive Maintenance

Recognizing the rise in concerns and complaints regarding bike lanes citywide, DOT's landscape team implemented a bike lane maintenance plan on July 1, 2024. The DOT Active Transportation team compiled data on concerns and complaints between April 2022 and 2024. Although bike lanes are generally maintained in good condition, the most frequent issue reported by cyclists is an obstruction such as a parked vehicle or other item in the bike lane. The parking compliance unit visits all bike lanes twice a month, and in FY 23-24, they issued 1,356 citations for bike lane parking violations. The maintenance team will use this information to help inform their maintenance activities and prioritize the locations with the most debris complaints.

### Supplemental Sweeping Support

When sweeping issues need to be addressed before the next scheduled sweep, DOT has remediation tools that can provide relief to the neighborhood. If parking is severely impacting a residential sweeping route, DOT can distribute trilingual flyers (English, Spanish, and Vietnamese) in two neighborhoods per month on windshields of parked cars to encourage compliance from residents. Additionally, Residential Street Sweeping program inspectors will leave door hangers to notify properties that have been identified as a source of an obstruction.

Enhanced sweeps can also be used to address areas ranging from two to three miles in length that have not been receiving effective street sweeping. Enhanced sweeps must be scheduled well in advance due to required coordination with the parking compliance unit. This requires additional staffing resources to establish a temporary tow zone by permit, post and manage temporary tow-away signage, and conduct outreach. On the day of the sweep, parking compliance officers go door-to-door to contact residents to move vehicles. In cases where the vehicle owner is not found, as a last resort, parking compliance officers facilitate the towing and removal of remaining vehicles.

DOT has contractual capacity to perform up to 16 enhanced sweeps annually depending on funding availability. Currently, DOT is budgeted to perform 14 enhanced sweeps. A list of completed enhanced sweeps over the past five years can be found in

Attachment B. No enhanced sweeps were performed from March 2020 to January of 2023 due to the pandemic.

### Parking Prohibition Signs

The most significant and long-term form of sweeping remediation consists of the installation and enforcement of parking prohibition signs. Residents, neighborhood groups, and councilmembers can request signage in neighborhoods. DOT inspectors verify the need for signs based on field assessments of parking impacts. Following the 2016 audit, DOT received funding to add limited signage throughout the city, resulting in 46 miles of added routes. As of October 2024, there are a total of 16 requests for new locations in the queue, though there is currently no funding to expand signage. If funding is made available, DOT will consider installing signs in those areas where at least 40% of curb miles are impacted by parked cars. To prioritize these areas, additional considerations are assessed to determine if parking prohibition signs should be installed including neighborhood support, compliance, and contractual and enforcement cost increases which can vary depending on the location of the signs. Additional one-time funding for equipment and labor are needed to install the signs.

Once parking prohibition signs are installed, DOT parking compliance officers can enforce street sweeping parking prohibitions. In San José, parking prohibition signs prohibit parking for up to five hours. Limiting street sweeping to strict timeframes presents logistical challenges and raises costs because it limits the flexibility of when a street can be swept from a 24-hour window to a much narrower window, which necessitates more precise routing.

The DOT Infrastructure Maintenance and Parking Compliance groups compiled a cost estimate to add 100 miles of enforceable street-sweeping signs based on known unit prices and best estimates of needed staffing support, contained in Figure 3 below.

Figure 3. Estimated Costs to Add 100 Miles of Street Sweeping Signs

Parking Prohibition Signage (fab & install)	\$785,000
Parking Compliance Vehicles x 3	\$150,000
Parking Compliance Unit Equipment	\$50,000
<b>One Time Total</b>	<b>\$985,000</b>
Additional Inspection staff	\$195,000
Sweeping Vendor Cost Increases	\$3,700
PCU Staff (3 Officers & 1 Supervisor).	\$800,000
<b>Ongoing Cost Total*</b>	<b>\$998,700</b>

*\*Revenue offset up to \$350,000 of above noted costs may be possible through the issuance and collection of additional parking citations*

Additionally, these annual ongoing vendor contract costs are anticipated to increase in accordance with the Refuse Rate Index, which is like a Consumer Price Index.

### Public Outreach

Any resident or council office can review a sweep day at their convenience by checking the Environmental Services Department utilities services website at the following link: [www.sjenvironment.org/lookup](http://www.sjenvironment.org/lookup). DOT has coordinated with ITD on the development of an email reminder alert service that residents can register to participate in. Once signed up, individuals will receive email reminders in advance of their designated sweep day reminding them to move their vehicle to help facilitate sweeping. The service will be rolled out as one of the new enhancements within the SanJose311 Vehicle Blight Project. DOT can work with interested council offices on engagement and is exploring additional ways to educate and inform residents about the importance of street sweeping services.

### Conclusion

Overall, the hybrid sweeping model is operating as it was intended and is generally effective at preventing pollutants from entering the waterways. DOT is responsive when issues arise and has various tools to help address community concerns. The 2016 Street Sweeping audit was officially closed out in June 2024 with the implementation of the waste bin program, and DOT added a notification option for SanJose311 users to receive sweeping alerts. Moving forward DOT will continue to look for options to improve outreach to residents, but to further enhance the sweeping program, additional funding and staffing would be needed to achieve additional notable improvements.

### **COORDINATION**

This memo was coordinated with the Environmental Services Department, the City Attorney's Office, and the City Manager's Budget Office.

/s/

John Ristow

Director, Department of Transportation

For questions, please contact Jennifer Seguin, Deputy Director, Department of Transportation, at [Jennifer.seguin@sanjoseca.gov](mailto:Jennifer.seguin@sanjoseca.gov) or (408) 794-6453.

### **ATTACHMENTS**

Attachment A – DOT Street Sweeping Effectiveness Chart

Attachment B – Enhanced Sweep Segments